

**ABSTRACT**

A time measurement system for measuring the delay between first and second signals  
5 comprises means for detecting the times of upcrossings when the first signal crosses a  
predetermined level (preferably substantially different from the average level) with a  
positive slope and the times of downcrossings when the first signal crosses the  
predetermined level with a negative slope. These events are transmitted to a remote  
device receiving the second signal, which uses the events to define respective  
10 staggered segments of the second signal, to sum said segments and to detect a  
predetermined feature in said sum, the position of said feature representing the delay  
between the first and second signals.